

# Responding to Syndromic Surveillance Alerts: An Adaptable Protocol for Georgia Health Districts

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## OBJECTIVE

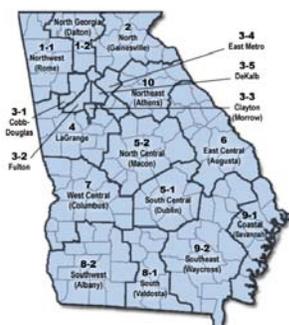
To develop a template protocol to guide local response to syndromic surveillance alerts generated through analyses of emergency department (ED) visit data.

## BACKGROUND

Although many syndromic surveillance (SS) systems have been developed and implemented, few have included response protocols to guide local health jurisdictions when alerts occur [1,2]. SS was first implemented in GA during the 2004 G-8 Summit. Six EDs in the Coastal Public Health District (PHD), 1 of 18 GA PHDs (Figure 1), conducted SS during that “national security special event.” Since that time, EDs in other PHDs have been actively recruited to participate in GA’s SS system.

In GA, the PHD has the responsibility for monitoring SS data. Likewise, the PHD responds to alerts and initiates public health investigations and interventions; the state Division of Public Health (DPH) assists, if requested. To address these responsibilities, the Coastal PHD informally developed their own response practices.

Figure 1. Georgia Public Health Districts



## METHODS

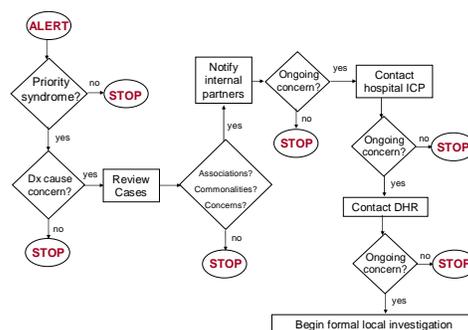
To develop a SS response protocol template for GA, we collected existing response protocols [1,2, Knox County Health Department, Knoxville, Tenn., unpublished data,]. In addition, sessions were held with the Coastal PHD to solicit their experience with informal response practices. Once we agreed to definitions of alerts based on combinations of EARS flags [3], we adapted these SS response guidelines to fit GA’s public health infrastructure and available SS data sources.

## RESULTS

Our response protocol provides a decision tree enabling local PHD to discern whether to progress from

data monitoring to active epidemiologic investigation (Figure 2). This step-by-step evaluation of the data supplies an easy-to-follow approach for assessing the concern level of the alert for an outbreak or bioterrorist event; a timeline for contacting internal and external partners for additional information, e.g. the hospital infection control practitioner, DPH; and a point at which a formal investigation should be initiated.

Figure 2. Simplified Flow-Chart of Response Protocol



## CONCLUSIONS

Implementing SS to detect disease events of public health significance necessitates the development, distribution, and local adaptation of response protocols to aid effective event response by public health practitioners. The utility of the GA response protocol needs further assessment through real-life investigation of local public health events. However, our response protocol has been well received by the PHDs. The PHDs are adapting the response protocol template to their specific District and ED infrastructure. Furthermore, initiating the response protocol—regarding what constitutes an alert—needs continued refinement. The ability to methodically evaluate and respond to SS alerts will likely result in improved detection and management of outbreaks, as well as detection and response to seasonal infectious diseases.

## REFERENCES

- [1] Duchin JS, Epidemiological response to syndromic surveillance signals. *Journal of Urban Health*. 2003;80:i115-i116.
- [2] Terry W, Ostrowsky B, Huang A, Should we be worried? Investigation of signals generated by an electronic syndromic surveillance system-Westchester County, NY. *MMWR* 2004;53(suppl):190-5.
- [3] Hutwagner L, Thompson W, Seaman GM, Treadwell T, The bioterrorism preparedness response early aberration reporting system (EARS). *J Urban Health* 2003;80(2 Suppl 1):i89-96.

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The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the Centers for Disease Control and Prevention.